

A L A B A M A

“Spots”

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Although thousands of Alabama anglers seek the ever-popular largemouth bass as their primary target on weekend outings, many affirm catching a spotted bass is second to none. Both species coexist in many Alabama lakes and reservoirs, explaining why some anglers catch the occasional “spot” while fishing for its more famous cousin. Spotted bass are well known for their aggressiveness once hooked; however, many other distinct differences exist between these two black bass species.

Habitat Preferences, Spawning Behavior and Diet

Spotted bass prefer cooler water, thus making them unfit for life in farm ponds where mid-summer surface water temperatures can reach the 90° Fahrenheit mark. They also favor areas low in

turbidity, which excludes sites that receive excessive runoff from tilled agricultural regions. In impoundments where these two species coexist, spotted bass tend to inhabit areas with rocky substrates and avoid those with mud bottoms and dense emergent vegetation. While largemouth bass are more likely to occupy backwater areas and coves, spotted bass favor locations along the main river channel. Two Alabama reservoirs that have excellent populations of spotted bass include Lewis Smith and Martin, both of which are deep, clear water systems with an abundance of steep rock ledges.

Spotted bass reach sexual maturity when they are 1 to 2 years of age, with relatively all fish being mature by the time they reach 10 inches in total length. Their spawning period in Alabama reservoirs occurs from mid April to late May depending on geographical location. Spawning is initiated first in systems located in the southwestern portion of

the state and later in the northeastern region. Increasing water temperature seems to be the most popular explanation as to when reproductive behavior begins; however, spawning has been documented over a wide range of water temperatures (55° F to 74° F). This indicates that other factors such as day length, water level stabilization, and long-term climatic conditions may be equally important. The spotted bass spawning period typically lasts around 30 to 45 days. This is much shorter than the duration of the largemouth bass spawn, which has been documented to last over 65 days in certain Alabama reservoirs. Spotted bass generally spawn deeper than largemouths and nest sites have been recorded at depths from 3 and 21 feet in reservoirs. Average nest depth is around 8 to 12 feet (depending on bottom contour), although nest sites in streams have been viewed as shallow as 10 inches along gravel bars.

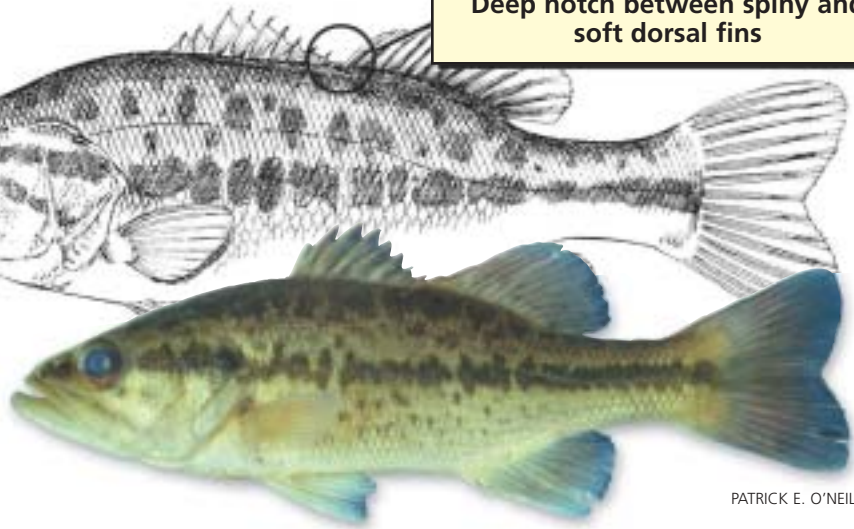
LARGEMOUTH BASS

Upper jaw extends well beyond back of the eye

Deep notch between spiny and soft dorsal fins



Tongue usually without tooth patch



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SMALLMOUTH BASS

Upper jaw extends to about the middle of the eye

Not deeply notched



Tongue usually with tooth patch



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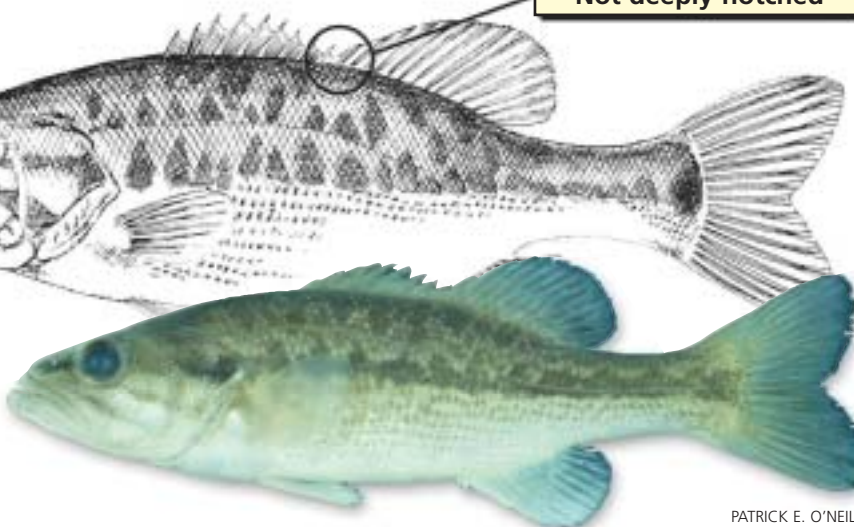
SPOTTED BASS

Upper jaw extends almost to the back of the eye

Not deeply notched



Tongue with tooth patch



PATRICK E. O'NEIL

In specific nutrient-poor Alabama reservoirs, a competitive edge is seen for spotted bass over the largemouth. Adult spotted bass tend to spawn earlier in these systems and thus young-of-year survival is increased due to a size advantage. This advantage allows young “spots” to out-compete largemouths since they can effectively forage on a wider distribution of prey sizes. Due to this phenomenon, the adult population in many of these water bodies contains a higher percentage of spotted bass compared to other black bass species. This competitive edge may also be apparent in many clear Alabama streams, where spotted bass outnumber largemouth bass in most instances.

The diet of adult spotted bass consists primarily of crayfish, fish, and insects. Past studies done on Alabama reservoirs indicated that 85 to 95 percent of the diet of adult spotted bass included fish; however, in stream habitats a stronger preference to crayfish was documented. In one study, stomach analysis revealed that crayfish made up 73 percent of the total diet of spotted bass located in specific stream environments. Streams typically contain higher densities of crayfish than reservoirs, which could indicate that spotted bass select crayfish above all other available prey items.

Identification and Similar Species

Identification of the spotted bass can be tricky to the inexperienced angler because they closely resemble other black bass

species. Spotted bass can be distinguished from smallmouth bass by their dark green and white coloration and by the presence of a black lateral stripe or jointed, horizontal blotches down the side of the fish. Smallmouth are bronze to olive green in appearance and adults have many irregularly spaced dark, vertical bars along the side. Similar to the spotted bass, largemouth have comparable coloration and also display a lateral stripe; therefore, other distinguishable characteristics must be utilized. Spotted bass have a small tooth patch on the tongue, which is rough to the touch. This structure is normally visible on smallmouth as well, yet is typically absent on largemouth bass.

Another difference among these species is the distance in which the upper jaw extends beyond the back of the eye. For both spotted and smallmouth bass, the upper jaw will not extend beyond the rear margin of the eye. On the largemouth it will extend well beyond the posterior portion of the eye when the mouth is closed. The spiny and soft dorsal fins are also noticeably more separated on largemouth bass compared to the other two species. Additionally, the presence of numerous spots below the lateral line on the adult spotted bass differentiates it from the largemouth and smallmouth.

Two sub-species of the spotted bass can be found in Alabama. The “Kentucky bass” occurs in the Tennessee River drainage in North Alabama, while the “Alabama spotted bass” is restricted to the upper Mobile Basin. The only discernable difference between these two sub-species externally is through the use

of scale counts along the lateral line and caudal peduncle region. Studies have shown a definite growth advantage for the “Alabama” strain compared to its more northerly located relative. Inter-grades of these two sub-species are distributed over much of the south-central portions of the state.

Angling Records and Longevity

The current Alabama record for spotted bass is 8 lbs., 15 oz. and was caught from Lewis Smith Reservoir in 1978. This fish held the International Game Fish Association rod and reel world record for 18 years and still remains one of the largest “spots” caught to date. The current world record of 9 lbs., 9 oz. was taken in 1996 from Pine Flat Lake, California. This population originated from broodstock collected around 1970 from the same body of water as the former world record, Lewis Smith Reservoir.

The life span of southeastern populations of spotted bass are typically 4 to 7 years compared to a longer life expectancy of 10 to 12 years for largemouth bass. This is one of many factors that account for the larger maximum size of largemouths compared to “spots.” This may provoke the inexperienced outdoorsman to assume that largemouth bass are a worthier target due to their increased growth potential. Although spotted bass do not achieve weights as heavy as the largemouth, pound for pound many seasoned anglers feel they are second to none.

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